

REMARKS

Applicants cancel claims 1-75 without prejudice, and Applicants reserve the right to pursue the original claims and other claims in this and other applications. Claims 76-89 have been added to more clearly describe the essence of the invention. No new matter has been added.

The Abstract has been amended, as requested. The application as amended is believed to be in proper form.

The claimed invention relates to a power generation system comprising an electric rotary machine connected mechanically to a turbine system. The electric rotary machine includes a displacement mechanism that “displaces said second field magnet in an axial direction and in a rotational direction with respect to said first field magnet in accordance with a balance between a magnetic acting force between said first field magnet and said second field magnet, and a direction of torque generated in said rotor.” The electric rotary machine operates so that “when said turbine is started, and said electric rotary machine is operated as an electric motor to elevate the speed of said turbine from zero to the self-sustaining speed of said turbine, the same magnetic pole centers of said first field magnet and said second field magnet are located in a line in accordance with the balance between the magnetic acting force between said first field magnet and said second field magnet, and the direction of rotating torque generated in said rotor.” Further, when the turbine “operates at a speed in excess of the self-sustaining speed, the electric rotary machine is operated as a generator to generate power, the direction of rotating torque generated in said rotor is reversed to thereby allow the same magnetic torque center positions of said first field magnet and said second field magnet to deviate from each other.”

None of the references of record—including U.S. Pat. Nos. 3,713,015 (“Frister”); 3,936,685 (“Glockner”); 4,484,083 (“Jefferies”); and 6,084,326 (“Nagai”)—whether considered alone or in combination, teach or suggest all of the limitations of claim 76.

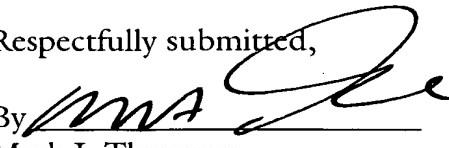
Frister discloses a first field magnet with sequentially different magnetic poles arranged in a rotational direction and a second field magnet rotatable with respect to the first field magnet. The Frister machine, however, controls a solenoid (60) to move a mechanism connected to the solenoid through a lever (50) in an axial direction along the shaft (12) for allowing an axial relative position of the second field magnet (11) relative to the first field magnet (10) to deviate. Thus, it does not displace the second field magnet in an axial direction and in a rotational direction with respect to the first field magnet in accordance with the balance between the acting magnetic force and the direction of torque generated in a rotor, without using an external force, as recited by claim 76.

Glockner, Nagai, and Jefferies do not cure the deficiencies of Frister. The references do not teach or suggest a field magnet with poles of sequentially different polarities arranged in a rotational direction, nor a second field magnet rotatable with respect to the first field magnet and having magnetic poles of sequentially different polarities arranged in a direction of backward rotations. Moreover, none of these cited references teach or suggest the operation of an electric rotary machine as recited by claim 76. Each of claims 77-89 depend from claim 1 and contain all of the limitations recited by claim 76.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Favorable action on the application with claims 76-89 is solicited.

Dated: February 9, 2004

Respectfully submitted,

By 
Mark J. Thronson

Registration No.: 33,082
DICKSTEIN SHAPIRO MORIN &
OSHINSKY LLP
2101 L Street NW
Washington, DC 20037-1526
(202) 785-9700
Attorney for Applicant